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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/790,792

03/03/2004

Sang-cheol Ko

102-1019

4382

38209

7590

10/16/2007

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EXAMINER

ELVE, MARIA ALEXANDRA

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

10/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/790,792

Applicant(s)

KO ET AL.

Examiner

M. Alexandra Elve

Art Unit

1793

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 07 August 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: _____.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____
13. ☒ Other: See Continuation Sheet.

/M. Alexandra Elve/
M. Alexandra Elve
Primary Examiner 1793

Continuation of 13. Other: Applicant argues improper finality. The examiner respectfully notes that the rejection contained a minor typographical error. Claims 1-2, 4, 6-7 & 16-22 are rejected over Richerzhagen, Yamamoto et al., Merdan et al and Peng et al. Claims 8 & 10-15 are rejected over Richerzhagen, Yamamoto et al., Merdan et al., Peng et al. and Hashimoto et al. A typographical error, that is, a minor transposition of numbers is not reason enough to withdraw finality. Applicant argues that the examiner does not address the limitations of claims 23-27. The examiner respectfully notes that these claims were withdrawn from examination because they are distinct from the originally claimed invention. Furthermore, applicant has received action on the merits of the originally presented invention. Thus claims 23-27 are withdrawn from further prosecution. In addition, etching a surface is different than formation of ink jet holes. Hence the election by original presentation. Applicant argues that "cleaning an organic material having flown onto the wafer" is clear and hence the 112, second paragraph rejection is not applicable. The examiner respectfully disagrees because "flown onto" is not clear, for example was the organic present prior to, is the organic a contaminant from handling, is the organic a desirable deposition and so forth. Applicant has the burden to clarify meaning in the claims. Applicant argues that Richerzhagen simply discloses a laser and liquid jet for material machining. The examiner respectfully disagrees because "Richerzhagen discloses a laser and liquid jet for material machining. The system has a processing module (housing) and the workpiece is cut using the laser-liquid jet device. Nd:YAG lasers may be used. Pressure range from 10 bars to 1000 bars. Nozzles are sizes from 5 to 50 microns. A conical shape may be used for focussing." Applicant argues that Richerzhagen does not teach the forming of a ink feeding port. The examiner respectfully notes that this is taught by Yamamoto et al. In response to applicant's arguments against the references individually, one cannot show obviousness by attacking the references individually where the rejections are based on a combination of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Applicant argues that Richerzhagen does not teach the ink feeding port forming process. The examiner notes that Richerzhagen teaches laser-liquid hole formation and Yamamoto et al. teaches an ink discharge port. Hence the 103 rejection over a combination of references. Applicant argues that Yamamoto et al. teaches the formation of an ink discharge port with an excimer laser. The examiner respectfully notes that Richerzhagen teaches the diode pumped solid laser (Nd:YAG) and Yamamoto et al. teaches the ink discharge hole. Applicant argues that the ink discharge port is different than the ink feeding port. The examiner respectfully notes that these terms are interchangeable. Applicant argues that the diameter of 10 to 500 microns is not taught by the prior art. The examiner respectfully disagrees because Richerzhagen teaches 5 to 50 microns and Yamamoto et al. teaches orifice diameters of 20 to 50 microns. The values are not exact (102 rejection) but rather fit within a range, that is, overlapping and approximating (ie 103 rejection). As for examiner's own hypothesis, these are based on *In re Aller*, see office action. Applicant argues that Merdan et al. is not analogous art and only teaches processing of stents. The examiner respectfully notes that the rejection is based on a combination of art. Furthermore, Merdan et al. uses a laser to form small holes (for fluid flow) and teaches the use of a gas laser. Applicant argues that Peng et al. does not teach the ink feeding port forming process. The examiner respectfully notes that the rejection is over a combination of references and Peng et al. is used to teach dicing of wafers while Yamamoto et al. teaches the ink discharge port.